

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the instant application:

Listing of Claims:

1. (Presently Presented) A software system digitally encoded in at least one machine readable medium configured to usable by at least one machine for use in providing a web service interface for a billing service, wherein a plurality of billing functions is provided by said billing service to computing applications residing on one or more computing devices in a distributed network, the software system comprising:

a. a web service interface, which is implemented within software stored on a tangible computer readable medium, defined for a billing service, said web service interface being adapted for coupling to a billing engine, said billing engine residing on a computing device in said distributed network and being adapted to perform said plurality of billing functions, said web service interface comprises a plurality of application programming interfaces, each of said application programming interfaces being associated with one of said billing functions and being implemented such that the [[first]] billing function associated therewith is performed after a web service invocation that commands performance of said billing function is received by said web service interface; and

b. a plurality of object classes which are implemented within software stored on a tangible computer readable medium, each of said object classes defining objects for storing data utilized by said billing engine and for communicating said data to said billing engine through at least one implemented application programming interface of said web service interface,

said web service interface being used to provide said billing service as a web service that is configured to be invoked by said computing applications in said distributed network.

2. (Currently Amended) The software system as claimed in claim 1, wherein said web service interface is extendable to provide said computing application with billing functions other than said plurality of billing functions, and said billing engine is adapted to perform said billing functions, wherein the Web service is a well-defined, self-contained component that encapsulates specific functionally, which is made available to other computing applications over a network by web service invocation using a Simple Object Access Protocol (SOAP).

3. (Presently Presented) The software system as claimed in claim 1, wherein said billing service is a billing account service, and wherein the web service interface defined for said billing account service comprises application programming interfaces associated with at least three of the following billing functions:

- i. creating billing accounts;
- ii. deleting billing accounts;
- iii. creating records of billing events in a billing account;
- iv. setting the status of a billing account;
- v. obtaining the status of a billing account; and
- vi. obtaining an invoice for a billing account.

4. (Presently Presented) The software system as claimed in claim 1, wherein said billing service is a rating service, and wherein the web service interface defined for said rating service comprises application programming interfaces associated with at least three of the following billing functions:

- i. registering billable services;
- ii. obtaining a billing rate package for a billable service;
- iii. subscribing a billable service for a billing account;
- iv. unsubscribing a billable service for a billing account;
- v. obtaining subscribed billable service instances for a billing account; and
- vi. processing billing events.

5. (Previously Presented) The software system as claimed in claim 1, wherein said plurality of object classes define three or more of the following objects:

- i. billing accounts;
- ii. billing events;
- iii. billing rate packages;
- iv. billable services;
- v. billing subscriptions; and
- vi. billable service instances.

6. (Presently Presented) A computer-readable medium upon which a set of software components is stored, said software components for use in providing a web service interface for a billing service, wherein a plurality of billing functions is provided by said billing service to computing applications residing on one or more computing devices in a distributed network, the set of software components comprising:

a. a web service interface for a billing service, said web service interface being adapted to be coupled to a billing engine, said billing engine residing on a computing device in said distributed network and being adapted to perform said plurality of billing functions, said web service interface comprising a plurality of application programming interfaces, each of said application programming interfaces being associated with one of said billing functions, each of said application programming interfaces being implemented such that the billing function associated therewith is performed after a web service invocation that commands performance of said billing function is received by said web service interface; and

b. a plurality of object classes, each of said object classes defining objects for storing data utilized by said billing engine and for communicating said data to said billing engine through at least one implemented application programming interface of said web service interface,

said web service interface being used to provide said billing service as a web service that is configured to be invoked by said computing applications in said distributed network.

7. (Currently Amended) The computer-readable medium as claimed in claim 6, wherein said web service interface is extendable to provide said computing application with billing functions other than said plurality of billing functions, and said billing engine is adapted to perform said billing functions, wherein the Web service is a well-defined, self-contained component that encapsulates specific functionality, which is made available to other computing applications over a network by web service invocation using a Simple Object Access Protocol (SOAP).

8. (Presently Presented) The computer-readable medium as claimed in claim 6, wherein said billing service is a billing account service, and the web service interface defined for said billing account service comprises application programming interfaces associated with three or more of the following billing functions:

- i. creating billing accounts;
- ii. deleting billing accounts;
- iii. creating records of billing events in a billing account;
- iv. setting the status of a billing account;
- v. obtaining the status of a billing account; and
- vi. obtaining an invoice for a billing account.

9. (Presently Presented) The computer-readable medium as claimed in claim 6, wherein said billing service is a rating service, and the web service interface defined for said rating service comprises application programming interfaces associated with three or more of the following billing functions:

- i. registering billable services;
- ii. obtaining a billing rate package for a billable service;

- iii. subscribing a billable service for a billing account;
- iv. unsubscribing a billable service for a billing account;
- v. obtaining subscribed billable service instances for a billing account; and
- vi. processing billing events.

10. (Original) The computer-readable medium as claimed in claim 6, wherein said plurality of object classes define three or more of the following objects:

- i. billing accounts;
- ii. billing events;
- iii. billing rate packages;
- iv. billable services;
- v. billing subscriptions; and
- vi. billable service instances.

11. (Presently Presented) A web service interface, which is implemented within software stored on a tangible computer readable medium, for a billing service for providing a plurality of [[first]] billing functions to computing applications residing on one or more computing devices in a distributed network, and wherein:

- a) said web service interface is adapted for coupling to a billing engine;
- b) said billing engine resides on a computing device in said distributed network and is adapted to perform said plurality of billing functions;
- c) said web service interface comprises a plurality of application programming interfaces;
- d) each of said application programming interfaces is associated with associated with one of said billing functions; and
- e) each of said application programming interfaces being implemented such that the billing function associated therewith is performed after a web service invocation that commands performance of said billing function is received by said web service interface; wherein said web

service interface is used to provide said billing service as a web service that is configured to be invoked by said computing applications in said distributed network.

12. (Currently Amended) The web service interface as claimed in claim 11, wherein said web service interface is extendable to provide said computing application with billing functions other than said plurality of billing functions, and said billing engine is adapted to perform said billing functions, wherein the Web service is a well-defined, self-contained component that encapsulates specific functionality, which is made available to other computing applications over a network by web service invocation using a Simple Object Access Protocol (SOAP).

13. (Presently Presented) The web service interface as claimed in claim 11, wherein said billing service is a billing account service, and wherein the web service interface defined for said billing account service comprises application programming interfaces associated with the following billing functions:

- i. creating billing accounts;
- ii. deleting billing accounts;
- iii. creating records of billing events in a billing account;
- iv. setting the status of a billing account;
- v. obtaining the status of a billing account; and
- vi. obtaining an invoice for a billing account.

14. (Presently Presented) The web service interface as claimed in claim 11, wherein said billing service is a rating service, and wherein the web service interface defined for said rating service comprises application programming interfaces associated with the following billing functions:

- i. registering billable services;
- ii. obtaining a billing rate package for a billable service;
- iii. subscribing a billable service for a billing account;

- iv. unsubscribing a billable service for a billing account;
- v. obtaining subscribed billable service instances for a billing account; and
- vi. processing billing events.

15. (Previously Presented) The web service interface as claimed in claim 11, wherein data is communicated to said billing engine through at least one implemented application programming interface of said web service interface in at least three objects selected from the following group:

- i. billing account object;
- ii. billing event object;
- iii. billing rate package object;
- iv. billable service object;
- v. billing subscription object; and
- vi. billing service instance object.

16. (Presently Presented) A method for providing a billing service comprising:
receiving a plurality of Web service invocations for a Web service interface, wherein each Web service invocation commands performance of a billing function, said billing function being performed by a billing engine hosted on a billing system, wherein said Web service invocation is digitally conveyed from a computing application executing on a computing device over a distributed network to the billing system, wherein said computing application provides at least one commercial service made available by a commercial service provider for a usage charge;

executing the billing function of the billing engine responsive to receiving each Web service invocation, wherein executing of the billing functions for different ones of the Web service invocations comprise actions causing the billing engine to:

- create a billing account for a user of the commercial service;
- delete a billing account for a user of the commercial service;

create a record of a billing event in a billing account corresponding to a user of the commercial service;

obtain the status of a billing account corresponding to a user of the commercial service; and

obtain an invoice for a billing account corresponding to a user of the commercial service,

wherein the Web service is a well-defined, self-contained component that encapsulates specific functionality, which is made available to other computing applications over a network by web service invocation using a Simple Object Access Protocol (SOAP).

17. (Currently Amended) The method, as claimed in claim 16, wherein the Web service interface is directly coupled to the billing engine. ~~wherein the billing functions of said billing service are performed by a server side billing engine, and wherein the Web service interface is a client side interface, wherein the Web service is a well defined, self contained component that encapsulates specific functionality, which is made available to other computing applications over a network by web service invocation using a Simple Object Access Protocol (SOAP).~~

18. (Currently Amended) The software system as claimed in claim 1, wherein the Web service interface is directly coupled to the billing engine.

~~wherein the Web service is a well defined, self contained component that encapsulates specific functionality, which is made available to other computing applications over a network by web service invocation using a Simple Object Access Protocol (SOAP).~~

19. (Currently Amended) The computer-readable medium as claimed in claim 6, wherein the Web service interface is directly coupled to the billing engine. ~~wherein the Web service is a well defined, self contained component that encapsulates specific functionality, which is made available to other computing applications over a network by web service invocation using a Simple Object Access Protocol (SOAP).~~

20. (Currently Amended) The web service interface as claimed in claim 11, wherein the Web service interface is directly coupled to the billing engine. ~~wherein the Web service is a well-defined, self contained component that encapsulates specific functionality, which is made available to other computing applications over a network by web service invocation using a Simple Object Access Protocol (SOAP).~~